Implementing Cisco Enterprise Wireless Networks (ENWLSI)

ID ENWLSI **Price** CHF 4,150.—(excl. VAT) **Duration** 5 days

Who should attend

- Wireless Network Engineers
- Security Network Engineers
- Sales Engineers
- Wireless Network Technicians
- Test Engineers
- Network Designers
- Network Administrators
- Network Managers
- Midlevel Wireless Support Engineers
- Project Managers

This course is part of the following Certifications

Cisco Certified Network Professional Enterprise (CCNP ENTERPRISE)

Prerequisites

Before taking this course, you should have:

- General knowledge of networks and wireless networks
- Routing and switching knowledge

Attending one of these Cisco courses below will help you prepare for this course:

Implementing and Administering Cisco Solutions (CCNA) Implementing and Operating Cisco Enterprise Network Core Technologies (ENCOR) Understanding Cisco Wireless Foundations (WLFNDU)

We recommend prior attendance of the courses

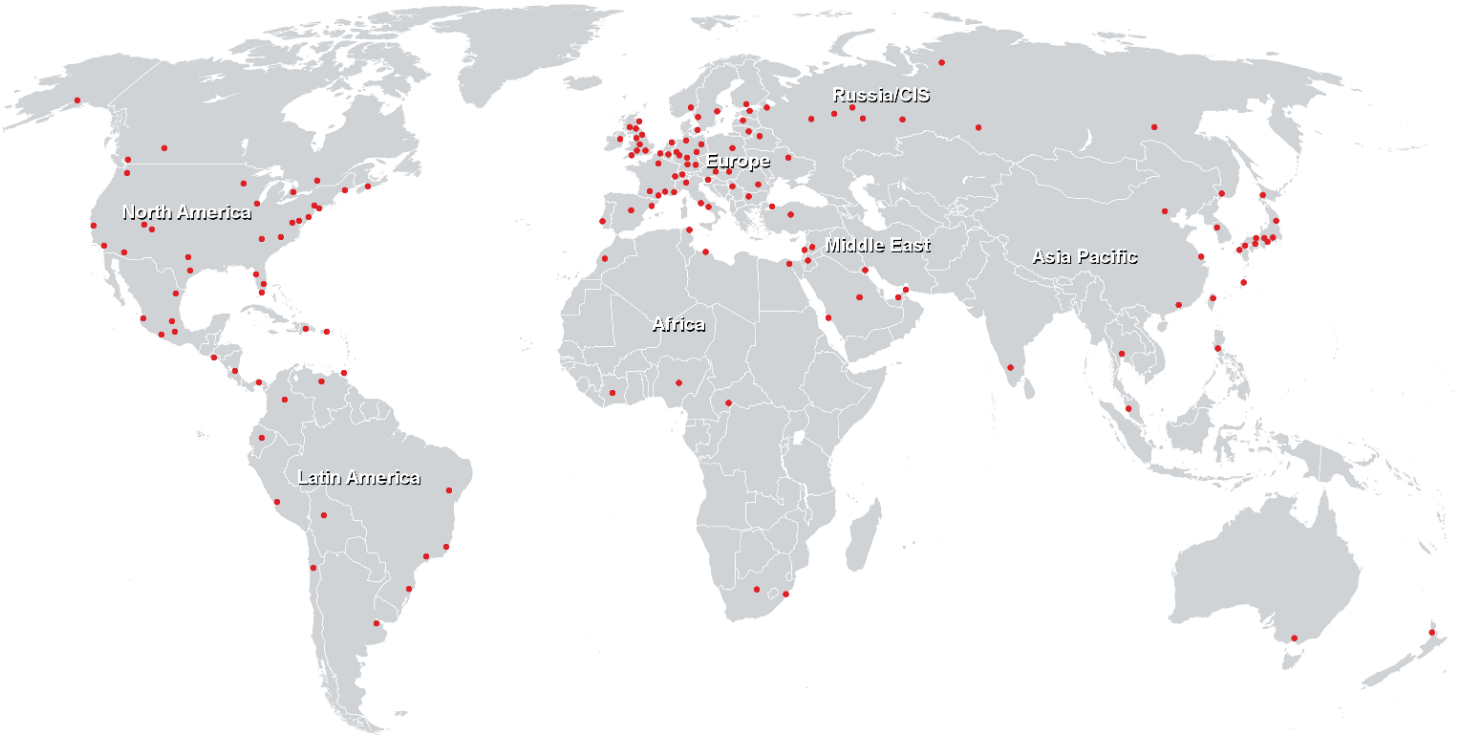
- !Wireless Fundamentals 1 (WFUN1) and Wireless Fundamentals 2 (WFUN2) or
- Certified Wireless Network Administrator - CWNA (CWNA)

Course Objectives

- Explain how to secure the wireless network infrastructure
- Access and navigate the remote lab
- Explain device administration
- Describe security best practices for administrative access to Cisco WLC
- Describe Cisco WLC configuration and overview for TACACS+
- Explain role-based access control in Cisco ISE
- Explain how to configure access to the access point
- Configure secure port access for the access points
- Implement the 802.1X authentication process
- Explain how to configure access points and Cisco ISE for the 802.1X authentication
- Describe how to monitor and troubleshoot a wireless network
- Describe access point joint issue troubleshooting
- Describe the tools for CAPWAP access point discovery, DTLS, and join issues troubleshooting
- Capture a successful AP authentication
- Describe how to monitor and manage the network for rogue devices and RF interferers on Cisco WLC and Cisco Prime Infrastructure
- Describe how to implement and add devices to Cisco Prime Infrastructure
- Describe how to add access points to maps and monitor wireless clients
- Explain reports and their functions in Cisco Prime Infrastructure
- Describe enhanced client information with Cisco ISE and location details with Cisco CMX
- Discover how to use Cisco Prime Infrastructure for network monitoring
- Explain how to observe wireless networks for rogue devices, add devices to, monitor radio frequency interferers, and integrate Cisco DNA Center with external resources
- Explain how to troubleshoot access point and WLC issues with Cisco DNA Center Assurance
- Explain enhanced network insights with Cisco AI Network Analytics
- Observe and learn how to use reports in Cisco DNA Center
- Explain how to implement AAA-Based wireless security on Cisco WLC and Cisco ISE
- Explain how to configure WLAN for 802.1X on Cisco WLC and wireless clients for 802.1X authentication
- Explain how to implement and configure AAA override on Cisco WLC and Cisco ISE
- Configure, understand, and perform FlexConnect authentication, identity-based networking, split tunneling,

and AAA services on Cisco WLC
- Explain how to upgrade FlexConnect access points
- Describe how to configure OfficeExtend
- Implement guest access in the wireless network
- Explain how to implement central web authentication
- Describe how to configure Cisco WLC and Cisco ISE for Centralized Web Authentication
- Show Cisco WLC configuration for Guest Services
- Explain the basics, onboarding process of BYOD
- Explain how to configure Cisco ISE for BYOD in the wireless network
- Describe how to monitor and troubleshoot client connectivity on Cisco WLC and authentication issues
- Show how to capture successful client authentication by using Radioactive Trace and Cisco ISE
- Describe the issues that affect client performance
- Explain wireless coverage and capacity, how to enhance client performance, and troubleshoot client throughput and data rate issues
- Describe how to implement QoS in wireless networks
- Describe QoS In wireless networks, marking QoS, and traffic classifications
- Explain congestions in the wireless world
- Describe IEEE 802.11 QoS fundamentals and how to configure Cisco WLC to support voice traffic
- Show how to configure QoS in the wireless network for voice and video services
- Describe how to optimize wireless utilization with Cisco Aire Time Fairness, QoS profiles, and Cisco Fastlane
- Implement and configure multicast services, forwarding, and Cisco AVC in wireless networks and on Cisco WLC
- Implement multicast services
- Explain how to configure mDNS and Cisco Media Stream
- Describe Cisco DNA Center Service for Bonjour and Cisco Media Stream
- Explain the QoS troubleshooting process in the wireless network and on Cisco WLC
- Describe how to use AVC to identify issues
- Describe how to verify and troubleshoot mDNS and media stream on Cisco WLC
- Explain how to deploy Cisco Spaces and Cisco CMX
- Describe how to implement location-based services and the provided functionalities
- Describe how to design for location services, deploy Cisco Spaces and Cisco CMX, and integrate Cisco Spaces and Cisco XMC with Cisco DNA Center, and Cisco CMS with Cisco Prime Infrastructure
- Describe how to deploy and configure Cisco Hyperlocation
- Describe how to implement detect and locate services in Cisco Spaces
- Describe how to prepare maps for location services in Cisco DNA Center, implement, detect, and locate services on Cisco CMX, analytics services in Cisco Spaces, and on Cisco CMX
- Describe how to implement presence services on Cisco CMX
- Describe how to implement and configure guest services, monitor, detect, and run analytics on wireless clients, rouge devices, and interferers in Cisco Spaces and with Facebook on Cisco CMX
- Describe how to troubleshoot location accuracy

Training Centres worldwide





Fast Lane Institute for Knowledge Transfer (Switzerland) AG

Husacherstrasse 3
CH-8304 Wallisellen
Tel. +41 44 832 50 80

info@flane.ch, https://www.flane.ch